TEJUS
CONSULTANTS

Test Report on Cement

Project	Improvements to swd in ward No. 08, Kodigehalli
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s KRIDL
Sample ID	Cement
Date of Sample Tested	31.12.2018
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	39Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	348 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	3mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	25 % to 35

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TEST REPORT

Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Improvements to swd in ward No. 08, Kodigehalli
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s KRIDL

SPECIFIC GRAVITY AND WATER ABSORPTION

FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Fine aggregate (River Sand/ M sand)	**Proposed Use**	PCC
Location/Source	At Site/Plant	**Date of Sampling**	31.12.2018
Period of Soaking	24 hours	**Date of Testing**	31.12.2018

Sl.No.	Test Property		TRIAL - 1	TRIAL - 2	TRIAL - 3	
A	Weight of sturated surface dry sample gm.		653	666	673	
B	Weight of oven - dry sample gm.		643	652	662	
C	Weight of Pycnometer Filled with water gm		1275	1275	1275	
D	Weight of Pycnometer + sample + water gm		1685	1690	1697	
E	Bulk specific gravity	$\frac{B}{(C+A-D)}$	2.646	2.598	2.637	**2.627**
G	Absorption (%)	$\frac{(A-B)*100}{B}$	1.555	2.147	1.662	**1.788**

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike
Project	Improvements to swd in ward No. 08, Kodigehalli
Consultants	Tejus Consultants, Bangalore
Contractor	M/s KRIDL

SIEVE ANALYSIS

Total Weight:	**3000** gms		
Type of Material	**Fine aggregate (River Sand/ M sand)**	**Proposed Use**	concrete
Sample Location	At Site/Plant	**Date of Sampling**	31.12.2018
		Date of Testing	31.12.2018

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	100
4.75 mm	215	215	7.17	92.83	90 - 100
2.36 mm	313	528	17.60	82.40	75 - 100
1.18 mm	323	851	28.37	71.63	55 - 90
0.600 mm	495	1346	44.87	55.13	35 -59
0.300 mm	783	2129	70.97	29.03	8-30
0.150 mm	632	2761	92.03	7.97	0 - 10
Pan	239	3000			-

Remarks : ✓ Satisfactory / Not Satisfactory

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TEST REPORT

Clients	Bruhath Bangalore Mahanagara Palike
Project	Improvements to swd in ward No. 08, Kodigehalli
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s KRIDL
Total Weight in gm:	3000

SIEVE ANALYSIS

Type of Material	40 mm down size	Proposed Use	PCC
Sample Location	At Site/Plant	Date of Sampling	31.12.2018
		Date of Testing	31.12.2018

IS Sieve Size	Weight Retained in gm	Cum. Weight Retained in gm	Cumulative Weight Retained in %	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA-2007) % of Passing For Graded Aggregate of Nominal Size
80.00mm	0	0	0.00	100.00	100
63.00mm	0	0	0.00	100.00	-
40.00mm	112	112	3.73	96.27	95-100
20.00mm	1363	1475	49.17	50.83	30-70
10.00mm	922	2397	79.90	20.10	10-35
4.75mm	481	2878	95.93	4.07	0-5
Pan	122	3000	100.00	0.00	

Remarks : Satisfactory / Not Satisfactory

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Test Report on Cement

Project	Improvements to swd in ward No. 08, Kodigehalli
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s KRIDL
Sample ID	Cement
Date of Sample Tested	03.01.2019
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	38 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	345 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	2mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	25 % to 35

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Quality Control / Assurance / Audit | Proof Checking (Structural Designs & Drawings)
Soil Stabilization and Shoring Services | Non - Destructive Testing

NABL ACCREDITED AS PER ISO/IEC 17025:2005

Ref No.: CECTCP/KRIDL/QC/2018-19 Date: 05.01.2019

TEST RESULTS OF PHYSICAL PROPERTIES OF REINFORCEMENT STEEL

Client : **Bruhat Bangalore Mahanagar Palike.**
Agency : **Technical Manager,** KRIDL, Bangalore.
Name of Project : Improvements to SWD in Ward No.08 Kodigehalli
Sample Identification : 10mm & 12mm Fe500 TMT Bars
Technical Reference : IS 1786:2008, IS 1608:2005, IS 1599:1985 (Reaffirmed 2006)
Date of test: : 05.01.2019

Sl.No	Nominal size (dia in mm)	Mass per metre (kg/metre)	TENSILE STRENGTH		
			0.20 % proof stress/ yield stress ($N/mm^{2)}$	Tensile strength ($N/mm^{2)}$	Elongation, percent on gauge length
1	10	0.614	526	572	17
2	12	0.892	543	589	18

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Soil Stabilization and Shoring Services | Non - Destructive Testing

NABL ACCREDITED AS PER ISO/IEC 17025:2005

Ref No.: CECTCP/KRIDL/QC/2018-19 Date: 07.01.2019

TEST RESULTS OF PHYSICAL PROPERTIES OF REINFORCEMENT STEEL

Client : **Bruhat Bangalore Mahanagar Palike.**
Agency : **Technical Manager,** KRIDL, Bangalore.
Name of Project : Improvements to SWD in Ward No.08 Kodigehalli
Sample Identification : 10mm & 12mm Fe500 TMT Bars
Technical Reference : IS 1786:2008, IS 1608:2005, IS 1599:1985 (Reaffirmed 2006)
Date of test: : 07.01.2019

Sl.No	Nominal size (dia in mm)	Mass per metre (kg/metre)	TENSILE STRENGTH		
			0.20 % proof stress/ yield stress (N/mm^2)	Tensile strength (N/mm^2)	Elongation, percent on gauge length
1	10	0.620	519	562	16
2	12	0.885	531	577	17

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For Civil Experts

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Test Report on Cement

Project	Improvements to swd in ward No. 08, Kodigehalli
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	M/s KRIDL
Sample ID	Cement
Date of Sample Tested	10.01.2019
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	37Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	355 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	2mm	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	27.00%	25 % to 35

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TEST REPORT

Client	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Improvements to swd in ward No. 08, Kodigehalli
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	M/s KRIDL

SPECIFIC GRAVITY AND WATER ABSORPTION

FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Fine aggregate (River Sand/ M sand)	Proposed Use	concrete
Location/Source	At Site/Plant	Date of Sampling	10.01.2019
Period of Soaking	24 hours	Date of Testing	10.01.2029

Sl.No.	Test Property		TRIAL - 1	TRIAL - 2	TRIAL - 3	
A	Weight of sturated surface dry sample gm.		654	668	660	
B	Weight of oven - dry sample gm.		649	652	644	
C	Weight of Pycnometer Filled with water gm		1275	1275	1275	
D	Weight of Pycnometer + sample + water gm		1686	1693	1691	
E	Bulk specific gravity	B / (C + A - D)	2.671	2.608	2.639	**2.639**
G	Absorption (%)	(A - B) *100 / B	0.770	2.454	2.484	**1.903**

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike
Project	Improvements to swd in ward No. 08, Kodigehalli
Consultants	Tejus Consultants, Bangalore
Contractor	M/s KRIDL

SIEVE ANALYSIS

Total Weight:	3000 gms			
Type of Material	Fine aggregate (River Sand/ M sand)	Proposed Use	concrete	
Sample Location	At Site/Plant	Date of Sampling	10.01.2019	
		Date of Testing	10.01.2019	

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	100
4.75 mm	215	215	7.17	92.83	90 - 100
2.36 mm	309	524	17.47	82.53	75 - 100
1.18 mm	421	945	31.50	68.50	55 - 90
0.600 mm	479	1424	47.47	52.53	35 -59
0.300 mm	713	2137	71.23	28.77	8-30
0.150 mm	642	2779	92.63	7.37	0 - 10
Pan	221	3000			-

Remarks : ✓ Satisfactory / Not Satisfactory

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike
Project	Improvements to swd in ward No. 08, Kodigehalli
Consultants	TEJUS CONSULTANTS
Contractor	M/s KRIDL
Total Weight:	10000 gms

SIEVE ANALYSIS

Type of Material	12.5 mm down size	Proposed Use	Concrete
Sample Location	At Site/Plant	Date of Sampling	10.01.2019
		Date of Testing	10.01.2019

IS Sieve Size (in mm)	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
20.0	0	0	0	100	100
12.5	565	565	5.65	94.35	90-100
10.0	4685	5250	52.50	47.50	40-85
4.75	4625	9875	98.75	1.25	0-10
Pan	125	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike
Project	Improvements to swd in ward No. 08, Kodigehalli
Consultants	Tejus Consultants, Bangalore
Contractor	M/s KRIDL

SIEVE ANALYSIS

Total Weight:	3000 gms			
Type of Material	Fine aggregate (River Sand/ M sand)	Proposed Use	concrete	
Sample Location	At Site/Plant	Date of Sampling	17.01.2019	
		Date of Testing	17.01.2019	

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	100
4.75 mm	213	213	7.10	92.90	90 - 100
2.36 mm	312	525	17.50	82.50	75 - 100
1.18 mm	425	950	31.67	68.33	55 - 90
0.600 mm	479	1429	47.63	52.37	35 -59
0.300 mm	715	2144	71.47	28.53	8-30
0.150 mm	630	2774	92.47	7.53	0 - 10
Pan	226	3000			-

Remarks : ✓ Satisfactory / Not Satisfactory

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TEST REPORT

Client:	BRUHAT BENGALORE MAHANAGARA PALIKE
Project:	Improvements to swd in ward No. 08, Kodigehalli
Consultants:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor:	M/s KRIDL

SPECIFIC GRAVITY AND WATER ABSORPTION

FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Fine aggregate (River Sand/ M sand)	**Proposed Use**	concrete
Location/Source	At Site/Plant	**Date of Sampling**	17.01.2019
Period of Soaking	24 hours	**Date of Testing**	17.01.2019

Sl.No.	Test Property		TRIAL - 1	TRIAL - 2	TRIAL - 3	
A	Weight of sturated surface dry sample gm.		665	676	665	
B	Weight of oven - dry sample gm.		651	664	645	
C	Weight of Pycnometer Filled with water gm		1275	1275	1275	
D	Weight of Pycnometer + sample + water gm		1699	1696	1685	
E	Bulk specific gravity	B / (C + A - D)	2.701	2.604	2.529	**2.612**
F	Absorption (%)	(A - B) *100 / B	2.151	1.807	3.101	**2.353**

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